

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/011905

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H04L29/12 H04L29/08

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04L E02F G07C G08G G05B G05D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/059320 A1 (TAMARU MASATAKE) 16 May 2002 (2002-05-16) abstract page 1, paragraph 1 - paragraph 5 page 12, paragraph 204 page 14, paragraph 254 - page 15, paragraph 268 page 16, paragraph 276 - paragraph 278 page 17, paragraph 302 - paragraph 303 page 19, paragraph 324 - paragraph 330	1-28
Y	US 6 505 100 B1 (STUEMPFLE MATTHIAS ET AL) 7 January 2003 (2003-01-07) abstract column 1, line 1 - line 25 column 5, line 17 - column 6, line 41 column 7, line 61 - column 9, line 19 ----- -/-	1-28

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

30 March 2005

Date of mailing of the international search report

21/04/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 134 940 A (LUCENT TECHNOLOGIES INC) 19 September 2001 (2001-09-19) abstract page 2, paragraph 1 - paragraph 3 page 2, paragraph 6 - paragraph 7 -----	11, 12
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 21, 3 August 2001 (2001-08-03) & JP 2001 117637 A (FUJITA CORP), 27 April 2001 (2001-04-27) abstract; figure 1 & DATABASE WPI Derwent Publications Ltd., London, GB; AN 2001-517018 & JP 2001 117637 A (FUJITA CORP) 27 April 2001 (2001-04-27) abstract -----	1-28
A	EP 1 178 458 A (KOMATSU MFG CO LTD) 6 February 2002 (2002-02-06) abstract paragraph '0063! - paragraph '0133! -----	1-28

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011905

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2002059320	A1	16-05-2002	JP 2002188183 A DE 10151942 A1 US 2002045986 A1	05-07-2002 05-12-2002 18-04-2002
US 6505100	B1	07-01-2003	DE 19909157 A1 DE 50001073 D1 EP 1033691 A2 ES 2188436 T3 JP 3485515 B2 JP 2000268293 A	21-09-2000 20-02-2003 06-09-2000 01-07-2003 13-01-2004 29-09-2000
EP 1134940	A	19-09-2001	CA 2329548 A1 EP 1134940 A1	14-09-2001 19-09-2001
JP 2001117637	A	27-04-2001	NONE	
EP 1178458	A	06-02-2002	AU 770499 B2 AU 3194600 A EP 1178458 A1 WO 0055828 A1	26-02-2004 04-10-2000 06-02-2002 21-09-2000